



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,637	02/20/2004	Wenxiao He	200311424-1	7335
22879 7590 06/06/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
GARY, ERIKA A				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
06/06/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM

mkraft@hp.com

ipa.mail@hp.com

# Office Action Summary

**Application No.**

10/783,637

**Applicant(s)**

HE, WENXIAO

**Examiner**

Erika A. Gary

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 3/17/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/S509)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 9, 17, 25, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Eschbach et al., US Patent Application Publication Number 20023/0088765 (hereinafter Eschbach).

Regarding claims 1, 9, 17, 25, and 33, Eschbach discloses a method for registering a mobile node with a home agent comprising: determining a home agent; establishing between the mobile node and the determined home agent a security tunnel having associated with said tunnel a single security association; and registering the mobile node with the home agent using the security tunnel [paragraph 0030].

3. Claims 1, 9, 17, 25, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Giaretta et al., US Patent Application Publication Number 2007/0230453 (hereinafter Giaretta).

Regarding claims 1, 9, 17, 25, and 33, Giaretta discloses a method for registering a mobile node with a home agent comprising: determining a home agent; establishing between the mobile node and the determined home agent a security tunnel having associated with said tunnel a single security association; and registering the mobile node with the home agent using the security tunnel [paragraph 0147].

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-7, 11-15, 19-23, 27-31, and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eschbach in view of Thubert et al., US Patent Application Publication Number 2004/0202183 (hereinafter Thubert).

Regarding claims 3, 11, 19, 27, and 35, Eschbach does not specifically disclose wherein registering the mobile node with the home agent comprises: dispatching a binding update request to the home agent using the security tunnel; and receiving a binding update acknowledgement by way of a reverse path security tunnel. However, Thubert teaches this limitation [paragraph 0036].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Eschbach to include Thubert. The motivation for this combination would have been to specifically teach further aspects of the security tunnel.

Regarding claims 4, 12, 20, 28, and 36, Eschbach does not specifically disclose discovering an applicable prefix for the home agent using the security tunnel. However, Thubert teaches this limitation [paragraph 0048].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Eschbach to include Thubert. The motivation for this combination would have been to specifically teach further aspects of the security tunnel.

Regarding claims 5, 13, 21, 29, and 37, Eschbach does not specifically disclose conveying data to a correspondent node using the security tunnel. However, Thubert teaches this limitation [paragraphs 0035, 0048].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Eschbach to include Thubert. The motivation for this combination would have been to specifically teach further aspects of the security tunnel.

Regarding claims 6, 14, 22, 30, and 38, Eschbach does not specifically teach communicating a return routability signal to the home agent using the security tunnel. However, Thubert teaches this limitation [paragraphs 0042, 0045, 0051].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Eschbach to include Thubert. The motivation for this combination would have been to specifically teach further aspects of the security tunnel.

Regarding claims 7, 15, 23, 31, and 39, Eschbach does not specifically teach establishing a reverse path security tunnel having associated with said tunnel a single security association. However, Thubert teaches this limitation. [paragraphs 0044, 0048].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Eschbach to include Thubert. The motivation for this combination would have been to specifically teach further aspects of the security tunnel.

6. Claims 2, 10, 18, 26, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eschbach in view of Johansson et al., US Patent Application Publication Number 2002/0080752 (hereinafter Johansson).

Regarding claims 2, 10, 18, 26, and 34, Eschbach does not specifically teach establishing a security tunnel comprises: creating a security policy database for at least one of a binding update message, a return routability message, prefix discovery message and payload data packet; and associating two or more security policy databases with a security tunnel using a single security association. However, Johansson teaches this limitation [paragraphs 0092-0093, 0114].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Eschbach to include Johansson. The motivation for this combination would have been to specifically teach further aspects of the security tunnel.

7. Claims 8, 16, 24, 32, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eschbach and Thubert in view of Johansson.

Regarding claims 8, 16, 24, 32, and 40, the combination of Eschbach and Thubert does not specifically teach establishing a reverse path security tunnel comprises creating a security policy database for at least one of a binding update

message, a return routability message, prefix discovery message and payload data packet; and associating one or more security policy databases with a security tunnel using a single security association. However, Johansson teaches this limitation [paragraphs 0092-0093, 0114, 0129].

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the combination of Eschbach and Thubert to include Johansson. The motivation for this combination would have been to specifically teach further aspects of the security tunnel.

### ***Response to Arguments***

8. Applicant's arguments filed 3/17/08 have been fully considered but they are not persuasive. Applicant argues that Eschbach does not teach or suggest registering the mobile node with the home agent using the security tunnel. However, the Examiner respectfully disagrees as the reference teaches establishing a security association between the target node (mobile node) and the home agent so that the target node can register with the home agent [paragraph 0030].

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 571-272-7841. The examiner can normally be reached on Monday-Thursday.

Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/EAG/  
June 2, 2008

/Erika A. Gary/  
Primary Examiner, Art Unit 2617